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IN THE CLAIMS:

Agent for Applicant requests that the following amendments be made to the claims without adding any new subject matter. Additions to the claims are underlined while deletions from the claims are enclosed in double square brackets.

1. (Previously presented) A computer implemented system for enabling data analysis comprising:

A computer linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements; and

An analytical engine, linked to or executed by the computer, that is operable to enable intelligent modeling, by the analytical engine applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables wherein the analytical engine includes a data management system for accessing and processing the knowledge elements.

2. (Original) The computer implemented system claimed in claim 1, wherein the analytical engine defines one or more knowledge entities, each of which is comprised of at least one knowledge element.

3. (Original) The computer implemented system as claimed in claim 2, wherein the analytical engine is adapted to update dynamically the knowledge elements with a plurality of records and a plurality of variables.

4. (Original) The computer implemented system claimed in claim 2, wherein the knowledge entity consists of a data matrix having a row and a column for each variable, and wherein the knowledge entity accumulates sets of combinations of knowledge elements for each variable in the intersection of the corresponding row and column.

5. (Original) The computer implemented system as claimed in claim 4, wherein the analytical engine enables variables and/or records to be dynamically added to, and subtracted from, the knowledge entity.

6. (Original) The computer implemented system claimed in claim 5, wherein the analytical engine enables the deletion of a variable by deletion of the corresponding row and/or column, and wherein the knowledge entity remains operative after such deletion.

7. (Original) The computer implemented system claimed in claim 5, wherein the analytical engine enables the addition of a variable by addition of a corresponding row and/or column to the knowledge entity, and wherein the knowledge entity remains operative after such addition.

8. (Original) The computer implemented system claimed in claim 5, wherein an update of the knowledge entity by the analytical engine does not require substantial re-training or re-calibration of the knowledge elements.

9. (Original) The computer implemented system claimed in claim 2, wherein the analytical engine enables application to the knowledge entity of one or more of: incremental learning operations, parallel processing operations, scenario testing operations, dimension reduction operations, dynamic query operations or distributed processing operations.

10. (Previously presented) A computer implemented system for enabling data analysis comprising:

   a) A computer linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements; and

   b) An analytical engine, linked to or executed by the computer to enable intelligent modeling, by the analytical engine applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables, wherein the analytical engine is linked to a data management system for accessing and processing the knowledge elements.

11. (Previously presented) A method of data analysis comprising:

   a) Providing an analytical engine, linked to or executed by a computer, the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, by applying one or more intelligent characteristics to one or more of the plurality of knowledge

elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables; and

b) Applying the intelligent modeling to the knowledge elements for data analysis.

12. (Previously presented) A method of enabling parallel processing, comprising the steps of:

a) Providing an analytical engine, linked to or executed by a computer, the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables;

b) Subdividing one or more databases into a plurality of parts and calculating a knowledge entity for each part using the same or a number of other computers to accomplish the calculations in parallel;

c) Combining all or some of the knowledge entities to form one or more combined knowledge entities; and

d) Applying the intelligent modeling to the knowledge elements of the combined knowledge entities so as to engage in data analysis.

13. (Previously presented) A method of enabling scenario testing, wherein a scenario consists of a test of a hypothesis, comprising the steps of:

a) Providing an analytical engine, linked to or executed by a computer, the computer being linked to one or more of data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables; and/or (iv) not using specific variables, wherein the analytical engine is responsive to introduction of a hypothesis to create dynamically one or more new intelligent models; and

b) Applying the one or more new intelligent models to see future possibilities, obtain new insights into variable dependencies as well as to assess the ability of the intelligent models to explain data and predict outcomes.

14. (Previously presented) A method of enabling dimension reduction, comprising the steps of:

a) Providing an analytical engine, linked to or executed by a computer, the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables; and

b) Reducing the number of variables in a knowledge entity that includes the one or more of the plurality of knowledge elements by the analytical engine defining a new variable based on the combination of any two variables, and applying the new variable to the knowledge entity.

15. (Original) The method as claimed in claim 14, further comprising the step of successively applying a series of new variables so as to accomplish further dimension reduction.

16. (Previously presented) A method of enabling dynamic querying:

a) Providing an analytical engine, linked to or executed by a computer, the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables;

b) Establishing a series of questions that are directed to arriving at one or more particular outcomes; and

c) Applying the analytical engine so as to select one or more sequences of the series of questions based on answers given to the questions, so as to rapidly converge on the one or more particular outcomes.

17. (Previously presented) A method of enabling distributed processing:

a) Providing an analytical engine, linked to or executed by a computer, the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements the analytical engine being operable to enable intelligent modeling, by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables, wherein the analytical engine includes a data management system for accessing and processing the knowledge elements, whereby the analytical engine enables the combination of a plurality of knowledge entities into a single knowledge entity; and

b) Applying the intelligent modeling to the single knowledge entity.

18. (Original) The computer-implemented system claimed in claim 1, wherein the analytical engine:

a) Enables one or more records to be added or removed dynamically to or from the knowledge entity;

b) Enables one or more variables to be added or removed dynamically to or from the knowledge entity;

c) Enables use in the knowledge entity of one or more qualitative and/or quantitative variables; and

d) Supports a plurality of different data analysis methods.

19. (Original) The computer-implemented system claimed in claim 18, wherein the knowledge entity is portable to one or more remote computers.

20. (Currently amended) The computer-implemented system claimed in claim 1, wherein the intelligent modeling applied to relevant knowledge elements enables one or more of:

a) credit scoring;

b) predicting portfolio value from market conditions and other relevant data;

c) credit card fraud detection based on credit card usage data and other relevant data;

d) process control based on data inputs from one or more process monitoring devices and other relevant data;

e) consumer response analysis based on consumer survey data, consumer purchasing behaviour data, demographics, and other relevant data;

f) health care diagnosis based on patient history data, patient diagnosis best practices data, and other relevant data;

g) security analysis predicting the identity of a subject from biometric measurement data and other relevant data;

h) inventory control analysis based on customer behaviour data, economic conditions and other relevant data;

i) sales prediction analysis based on previous sales, economic conditions and other relevant data;

j) computer game processing whereby the game strategy is dictated by the previous moves of one or more other players and other relevant data;

k) robot control whereby the movements of a robot are controlled based on robot monitoring data and other relevant data; and

l) A customized travel analysis whereby the favorite destination of a customer is predicted based on previous behavior and other relevant data. [[, and]]

21. (Previously presented) A computer program product for use on a computer system for enabling data analysis and process control comprising.

a) a computer usable medium; and

b) computer readable program code recorded on the computer useable medium, including:

i) program code that defines an analytical engine that is operable to link to one or more data sources adapted to provide a plurality of knowledge elements wherein the analytical engine is further operable to enable intelligent modeling based on one or more of the plurality of knowledge elements by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii)

purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables.

22. (Original) The computer program product as claimed in claim 21, where the program code defining the analytical engine instructs the computer system to define one or more knowledge entities, each of which is comprised of at least one knowledge element.

23. (Original) The computer program product as claimed in claim 22, wherein the program code defining the analytical engine instructs the computer system to update dynamically the knowledge elements with a plurality of records and a plurality of variables.

24. (Original) The computer program product as claimed in claim 22, wherein the program code defining the analytical engine instructs the computer system to establish the knowledge entity so as to consist of a data matrix having a row and a column for each variable, and wherein the knowledge entity accumulates sets of combinations of knowledge elements for each variable in the intersection of the corresponding row and column.

25. (Original) The computer program product as claimed in claim 24, wherein the program code defining the analytical engine instructs the computer system to enable variables and/or records to be dynamically added to, and subtracted from, the knowledge entity.

26. (Original) The computer program product as claimed in claim 25, wherein the program code defining the analytical engine instructs the computer system to enable the deletion of a variable by deletion of the corresponding row and/or column, and wherein the knowledge entity remains operative after such deletion.

27. (Original) The computer program product claimed in claim 25, wherein the program code defining the analytical engine instructs the computer system to enable the addition of a variable by addition of a corresponding row and/or column to the knowledge entity, and wherein the knowledge entity remains operative after such addition.

28. (Original) The computer program product claimed in claim 25, wherein the program code defining the analytical engine instructs the computer system to enable the update of the knowledge entity without substantial re-training or re-calibration of the knowledge elements.

29. (Original) The computer program product claimed in claim 22, wherein the program code defining the analytical engine instructs the computer system to enable application to the

knowledge entity of one or more of: incremental learning operations, parallel processing operations, scenario testing operations, dimension reduction operations, dynamic query operations or distributed processing operations.

30. (Original) A computer-implemented system as claimed in claim 1, wherein the analytical engine enables process control.

31. (Original)   The computer-implemented system as claimed in claim 30, wherein the analytical engine enables fault diagnosis.

32. (Currently amended) A method according to claim 11, wherein the method is implemented in a digital signal processor chip or [[any]] a miniaturized processor medium.

33. (Withdrawn) The computer implemented system claimed in claim 1, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

34. (Withdrawn) The computer implemented system claimed in claim 33, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

35. (Withdrawn) The computer implemented system claimed in claim 10, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

36. (Withdrawn) The computer implemented system claimed in claim 35, wherein the dynamic adaptation consists of the analytical engine dynamically applying the intelligent characteristics to the knowledge elements.

37. (Withdrawn) The method of data analysis claimed in claim 36, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

38. (Withdrawn) The method of data analysis claimed in claim 37, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

39. (Withdrawn) The method of enabling parallel processing claimed in claim 12, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

40. (Withdrawn) The method of enabling parallel processing claimed in claim 39, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

41. (Withdrawn) The method of enabling scenario testing claimed in claim 13, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

42. (Withdrawn) The method of enabling scenario testing claimed in claim 41, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

43. (Withdrawn) The method of enabling dimension reduction claimed in claim 14, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

44. (Withdrawn) The method of enabling dimension reduction claimed in claim 14, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

45. (Withdrawn) The method of enabling dynamic queries claimed in claim 16, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

46. (Withdrawn) The method of enabling dynamic queries claimed in claim 16, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

47. (Withdrawn) The method of enabling distributed processing claimed in claim 17, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

48. (Withdrawn) The method of enabling distributed processing claimed in claim 17, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.